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| APPLICATION NO.        | FILING DATE                 | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.                                   | CONFIRMATION NO. |
|------------------------|-----------------------------|----------------------|---|------------------|
| 10/813,269             | 03/31/2004                  | Lawrence Shah        | A8700   | 5356             |
| 23373<br>SUGHRUE M     | 7590 01/26/2007<br>ION PLLC |                      | EXAM  | INER             |
| 2100 PENNSY            | LVANIA AVENUE, N.V          | ٧.                   | EXAMINER  NGUYEN, DUNG T  ART UNIT PAPER NUMBER  2828 | DUNG T           |
| SUITE 800<br>WASHINGTO | N, DC 20037                 |                      | ART UNIT PAPER NUMBER                                 |                  |
|                        | ,                           |                      | 2828  |                  |
|                        |                             |                      |   |                  |
| SHORTENED STATUTOR     | RY PERIOD OF RESPONSE       | MAIL DATE            | DELIVERY MODE   |                  |
| 3 MO                   | ONTHS                       | 01/26/2007           | PAPER   |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| •  |  |  | w           |
|--|--|--|-------------|
|  | Application No.  | Applicant(s)   |             |
|  | 10/813,269   | SHAH ET AL.  |             |
| Office Action Summary  | Examiner   | Art Unit   | <del></del> |
|  | Dung (Michael) T. Nguyen   | 2828·  |             |
| The MAILING DATE of this communication ap<br>Period for Reply  | pears on the cover sheet with the  | ne correspondence address  |             |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period.  - Failure to reply within the set or extended period for reply will, by statut Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNICAT<br>136(a). In no event, however, may a reply b<br>will apply and will expire SIX (6) MONTHS<br>te, cause the application to become ABAND | ION.  e timely filed  from the mailing date of this communioned (35 U.S.C. § 133).   |             |
| Status   |  |  |             |
| 1) Responsive to communication(s) filed on 27 (  | October 2006.  | :  |             |
| 2a) This action is <b>FINAL</b> . 2b) ⊠ This   | s action is non-final.   |  |             |
| 3) Since this application is in condition for allowa   | ance except for formal matters,  | prosecution as to the meri   | its is      |
| closed in accordance with the practice under   | Ex parte Quayle, 1935 C.D. 11  | , 453 O.G. 213.  |             |
| Disposition of Claims  |  |  |             |
| 4) Claim(s) <u>1-31 and 48-79</u> is/are pending in the  | annlication  | •  |             |
| 4a) Of the above claim(s) is/are withdra   |  | •  |             |
| 5) Claim(s) is/are allowed.  |  |  |             |
| 6) Claim(s) 1-6,8-22,24-31,48-54,56-70 and 72-   | 79 is/are rejected.  | •  | •           |
| 7) Claim(s) 7,23,55 and 71 is/are objected to.   | _ ,  |  |             |
| 8) Claim(s) are subject to restriction and/o   | or election requirement.   |  |             |
|  |  | * ************************************   |             |
| Application Papers   |  | :  |             |
| 9) The specification is objected to by the Examination   |  | ;  |             |
| 10)☐ The drawing(s) filed on is/are: a)☐ acc   |  |  |             |
| Applicant may not request that any objection to the  |  |  |             |
| Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the E   |  | and the second s |             |
| Priority under 35 U.S.C. § 119   |  | •  |             |
| 12) ☐ Acknowledgment is made of a claim for foreign  | n priority under 35 II S.C. & 110  | )<br>(a)_(d) or (f)  |             |
| a) ☐ All b) ☐ Some * c) ☐ None of:   | in priority under 33 0.3.0. § 11.  | o(a)-(u) or (i).   |             |
| 1. Certified copies of the priority documen  | its have been received   | •  |             |
| Certified copies of the priority document  |  | cation No.   |             |
| 3. Copies of the certified copies of the prior   |  |  | e           |
| application from the International Burea   | •  | · · · · · · · · · · · · · · · · · · ·  |             |
| * See the attached detailed Office action for a lis  | •  | eived.   |             |
|  | •  | •  |             |
|  |  |  |             |
| Attachment(s)  |  |  |             |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 4) Ll Interview Sumn<br>Paper No(s)/Ma   |  |             |
| 3) Information Disclosure Statement(s) (PTO/SB/08)   | 5) Notice of Inform  |  |             |
| Paper No(s)/Mail Date  | 6) Other:  | :  |             |

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### **OFFICE ACTION**

#### Response to Arguments

Applicant's arguments with respect to claims 1-31 and 48-79 have been considered but are most in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 11-15, 48-51, 59-62 are rejected under 35 U.S.C. 102(b) as being anticipated by Palese (2002/0131164).

With respect to claims 1-3, 11-15, 48-51, 59-63, Fig.1-3 shows an apparatus for generating optical pulses, wherein each pulse may have individualized characteristics, the apparatus comprising:

laser means 14 (fiber amplifier 114, sketcher grating 104, and compressor 34 or 134) for generating the bursts of composite pulses (it is understood that the pulses are composite because of the fixed duration threshold between two pulses);

control means 128 that controls the laser means; and

beam manipulation means 24 and 124 for monitoring the wavelength characteristics (spectrometer (power meter) 24) and a variable repetition rate (photodiode 124 measures a rep.

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rate as stated in claim 4 of this application) of the composite pulse bursts and generates feedback data for the control means for pulse wavelength control and the variable repetition rate (para.0009).

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-6, 8, 16-22, 24, 26-31, 52-54, 56, 64-70, 72, and 75-79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palese (2002/0131164) in view of Kane (6219142).

With respect to claims 4, 16-20, 27-31, 52, 64-68, and 75-79, Palese disclose all limitations of the claims except for the means for monitoring the pulsewidth (optical gating device).

Kane teaches the means for monitoring the pulsewidth (optical gating device) in Fig.1.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Palese what is taught by Kane to monitor the laser pulsewidth (col.3, 1.39-60).

With respect to claims 5-6, 21-22, 53-54, and 69-70, Kane discloses in Fig.1 the means 14 for converting an optical frequency comprising at least one optical member that converts a portion of the fundamental of the laser pulses into at least one higher order harmonic signal.

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With respect to claims 8, 24, 56, and 72, Kane discloses in Fig.1 a spectrometer 16.

With respect to claims 26, Kane discloses the beam profiler (col.22, l.28-34 describes the same meaning as a profiler).

Claims 9, 25, 57, and 73 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palese (2002/0131164) in view of Kane (6219142) and further in view of DeSimone (5933274).

Palese and Kane disclose all limitations of the claims except for the telescope and steering optics.

DeSimone teaches in Fig.1 and col.3, lines 14-24 the telescope and steering optics.

it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Palese and Kane what is taught by DeSimone to allow accurate beam alignment to a cross hair mark on the target and to allow the user to control the plane of ablation (col.3, lines 18-24).

With respect to claims 10, 58, and 74, Kane discloses the beam profiler (col.22, l.28-34 describes the same meaning as a profiler).

### Allowable Subject Matter

Claims 7, 23, 55, and 71 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the

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base claim and any intervening claims. The above prior art fail to disclose the limitations as recited in the claims.

# **Communication Information**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dung (Michael) T Nguyen whose telephone number is (571) 272-1949. The examiner can normally be reached on 8:30 - 17:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Min Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3329.

Michael Dung Nguyen

1/18/07